ABSTRACT OF THE DISCLOSURE

In a fuel cell system 10, a cracking unit 20 is provided upstream of a reformer 36. When the cracking unit 20 is supplied with oxygen and gasoline as a hydrocarbon-based fuel, the gasoline is partially oxidized and decomposed using oxidation-generated heat to give a hydrocarbon with a lower carbon number. The hydrocarbon with the lower carbon number obtained by such gasoline pyrolysis is fed to the reformer 36 and supplied to a reforming reaction zone.